Mediating new individual-environment relations through experimentation on ambiance

L'expérimentation sur l'ambiance, médiateur de nouvelles relations individu-environnement

Polina Chebotareva and Nina Rask

OpenEdition
Journals

This text was automatically generated on 10 December 2018.

Mediating new individual-environment relations through experimentation on ambiance

L'expérimentation sur l'ambiance, médiateur de nouvelles relations individu-environnement

Polina Chebotareva and Nina Rask

Introduction

1   We would like to begin this article in 2014, at the Danish pavilion for the 14th International Architecture Exhibition *La Biennale di Venezia*. The Danish pavilion was curated by landscape architect Stig L. Andersson, under the overarching theme of 'Empowerment of Aesthetics'. Inside the pavilion, elements from nature, such as tree roots and bark, the white color of clouds, sand and earth, were showcased next to architectural projects and elements of the built environment. According to Andersson, it is at the intersection of the natural, social and the built environment that one can locate atmosphere and the empowering role of aesthetics.

> The abiotic, non-living matter like wind, water, light, temperature and sand, that together with the living matter, the biotic, forms everything. The ever changing and different states of being which all have their own purpose. This is my suggestion for which atmospheres we shall base our future on: Our cities, our countryside, our world. Empowerment of aesthetics is just that: The belief that our senses and our feelings should play a complementary role to the rational in determining how we want our world to be in the future. (Andersson, 2014, p. 49)

2   In the complementary catalogue to the exhibition, Andersson defines his understanding of aesthetics as the multisensory and affective perception of the natural and built environment (*ibid.*). Atmosphere, for Andersson, is a key aspect of this aesthetics. Furthermore, Andersson argues that the power of architectural aesthetics lies in how the sensory and affective perception forms the foundation for new decisions for a future

world. These arguments are relevant for the study of atmospheres and ambiances. Although there are no direct references, Andersson's definition of aesthetics follows very closely the definition of atmosphere as *aesthesis,* put forth by Gernot Böhme (1993). Following this, it can be seen as a propaedeutic exploration, which highlights two aspects of atmosphere that have been largely overlooked in experimental and theoretical research.

3　The first overlooked aspect – that atmosphere lies at the intersection of the natural, social and built environment – might seem obvious at first sight. Atmosphere is a term used in physical sciences and by laymen to define the layer of gasses making life on Earth possible. Meanwhile, in the arts, philosophy and humanities, atmosphere is understood as the affective tone of the air in-between object and subject (e.g. Böhme, 1993; Zumthor, 2006). Hence, it is a term encompassing the natural, social and the built environments. The importance of addressing the duality of atmosphere as both a meteorological phenomenon and spatial experience is stressed in theoretical research (e.g. Bille, Bjerregaard & Sørensen, 2015). In particular, air has been investigated in relation to weather and perception (Ingold, 2005), artistic design experiments (Wagenfeld, 2008), and affect and bio-politics (McCormack, 2008; Adey, 2013; Borch, 2014). This research, however, does not investigate everyday urban spaces, nor architectural design of the built environment. In these areas, theoretical and empirical research has primarily focused on locating atmospheres between the social and the built environment, and investigating how people co-create atmospheres (Edensor & Sumartojo, 2015; Thibaud, 2015; Bille, 2015). This has left questions unexplored, such as: how can a gust of wind be understood as an atmospheric quality of a built environment? And, how can a cloud be perceived as forming a boundary of a building?

4　The relevance of investigating these questions is particularly evident in relation to several experimental contemporary architectural practices from the USA, Europe and Japan. For instance, take the Blur Building by American architects Elizabeth Diller and Ricardo Scofidio, in 2004. Constructed as a temporary pavilion for the Swiss National Expo in 2002, the building was set in the Neûchatel Lake. The building consisted of a steel structural skeleton that drew up water from the lake, atomized it, and sprinkled it out as a fine mist, creating an ever-changing cloud. The building was experienced as a cloud and, according to Smaibegovic (2015), observing and describing it became a perceptual exercise in identifying detail and variation in movements of the atmosphere. In a similar manner, the Swiss architect Philippe Rahm also uses materials such as air and water to create atmospheric environments. In the Jade Eco Park, Rahm created a landscape of different temperature zones by designing water flows beneath ground. As Rahm (2016) argues, by working with climatic 'materials', a new, critical urban language can be created. While both the Blur Building and Jade Eco Park are highly experimental and far from everyday life, the Japanese architect Hiroshi Sambuichi designs mundane spaces with atmospheric elements. For instance, in the community house called Orizuru Tower, the top floor is designed to increase the flow of wind, so that it becomes an atmospheric quality of the spatial experience.

5　In these examples from architectural practice, atmospheric qualities from the natural environment are seamlessly integrated into the built environment with architectural design. This gives rise to new perceptual (aesthetic) experiences and new relations with the natural environment (Smailbegovic, 2015; Rahm, 2016; Lee, 2017). Atmosphere, therefore, lies in the interactions between the natural, social and built environments.

These interactions and, in particular, how they could lead to new perceptions of and relations with the surrounding environment is an area in need of more thorough experimental and theoretical exploration. This brings us to the second overlooked quality of atmospheres: that the empowering role of architectural aesthetics lies in the atmosphere.

6   Empowerment, in this case, is seen in relation to an individual's multisensory and affective perception of the environment. As Andersson (2014) suggests, such a perception can be the base of understanding what world we want in the future. Andersson seems to imply with his exhibition that, for this to happen, the perceiving individual must be attentive to and consciously aware of the atmosphere. There is theoretical support for this argument in perception psychology. Shifting the attention from an object to the 'background' and being aware of one's body-in-space may lead to a playful gaze and exploratory behavior (Houlgate, 1993; Baron, 2008). Such exploration can, in theory, lead to rethinking old habits and seeing new possibilities for actions and experiences (*ibid*.). Furthermore, becoming aware of an atmosphere may lead to a critical awareness of the political forces and design elements that co-produce it (Roquet, 2016). To explore and develop these theoretical arguments, there is a need for empirical research that explores: 1) whether becoming aware of an atmosphere can lead to new actions, and 2) how design could make users aware of an already existing atmosphere (rather than stage a new atmosphere). At the moment, such empirical research is lacking.

7   Empirical studies within the field of atmosphere and the closely related field of ambiance have primarily been focused on understanding how the affective tone of a situation is co-produced by social, environmental, and designed factors (Thibaud, 2015; Latour, 2003). While the field of atmosphere is more focused on the air and affect in-between agents (things, people, climate, politics), the field of ambiance is focused on the mediating role of human multi-sensory perception between the individual and world (Roquet, 2016). In both fields of research, empirical studies have been exploring the link between the affective tone, design and behavior. To give a short (and non-comprehensive) overview, there is, for instance, research on how atmospheres motivate shopping behavior in a mall or a collective affect at a sports match or political rally (Albertsen, 2016; Borch, 2014); how specific atmospheres foster specific behavior (Linnet, 2012; Bille, 2015); how ambiances are registered in everyday urban space and buildings (Thibaud, 2013; Coelho, 2015). In general, this research is interested in understanding how the behavior in an existing situation is affected by the atmosphere or ambiance, regardless of whether the person is attentive or aware of the atmosphere. Furthermore, this research does not investigate how exploratory behavior or new actions arise in an atmosphere. The design-experimental research in this field has been focused on the staging of new ambiances (e.g. Demers & Potvin, 2016) or expression of atmospheric elements (Wagenfeld, 2008). Thus, there is a lack in design-experiments to explore how an already existing atmosphere can be brought to a person's awareness. This is where we wish to contribute.

8   In this article, we present two experimentations on ambiance. In both experimentations, we explore the hypothesis that architectural design can make a user more attentive to and aware of an already existing atmosphere and, through this, foster explorative behavior and new relations to the surroundings. We refer to 'experimentations on ambiance' because we are particularly interested in the mediating effect that an attention to the atmosphere can have on actions. We refer to a person's 'attention to an already existing atmosphere' because we wish to address both the perception of climatic, socio-

political and affective elements – that is, wind, scents, pollution, agitations, etc. The two experimentations are both situated within the field of architectural design. The first experimentation is conceptual and the second experimentation is design-practice.

9   The conceptual experimentation on ambiance is focused on the concept of the primitive hut, which was introduced in the text '*Essai sur l'architecture*' by Marc-Antoine Laugier, originally written in 1755. This concept and text have had a strong impact on architectural discourse, specifically on understanding the role of architectural design in relation to atmosphere and climate. Written well over two centuries ago, references to the text continue to appear in contemporary discussions regarding architecture's relation to atmosphere, both in western (Ghidoni, Piovene & Tamburelli, 2013) and in eastern designs (Fang, 2016). In our experimentation, we follow the method of narrative inquiry, and rewrite the passage from the text where the primitive hut is introduced. The rewritten passage is based on our assumption that architectural design can bring atmosphere to a person's awareness, and conceptually explores the consequences of this for behavior.

10 The design experimentation on ambiance is a presentation and analysis of the installation 'Urban Carpet' by Polina Chebotareva in collaboration with Elias Melvin Christiansen. The installation was designed to bring the existing atmosphere at a road crossing to people's awareness. It was realized in Aarhus, Denmark, in August 2018. The effect of the installation was documented through observations. The installation explores the hypothesis presented in this paper in a real-life situation.

11 We do not present an in-depth analysis and discussion of the experiments. Our aim is to present two new approaches to experimentation on ambiance to showcase a breadth of potential. With this we illuminate an overlooked aspect of atmospheres, and inspire a new direction for experimental research on ambiances. We begin this paper with a brief theoretical framework for understanding the two experimentations.

Awareness of atmosphere, a theoretical framework

12 There are two strands of theoretical research which explore how an attention to the multisensory surroundings could lead to new actions. The first strand is within a phenomenological and ecological understanding of perception in philosophy and psychology, and the second strand is within conceptual analyses of architecture. The two strands are not directly connected and neither strand makes a direct reference to research on atmosphere or ambiance. It is outside the scope and focus of this article to make an in-depth theoretical analysis of the three strands of research and their interrelations. However, to present the theoretical framework for understanding our two experimentations on ambiance, and to point to an area in need of more thorough theoretical analyses, we find it useful to make a tentative link between the fields.

13 The ecological approach to visual perception was developed by James Gibson (1986) and is focused on observable interactions between environment and individual. According to Gibson, the environment has innumerable possibilities for interactions called affordances, but it is only a limited number of the possible affordances that are actualized by an individual in a relation to a given environment (Gibson, 1986). Therefore, the individual never perceives all of the possible ways of interacting in an environment. Such a distinction can be understood as a field of affordances (what is actualized) and a

landscape of affordances (what is available) (Rietveld & Kiverstein, 2014; Withagen *et al.*, 2017). Most commonly, the ecological approach attributes what affordances an individual perceives to the social situation, current individual needs, earlier experiences, or cultural ways of doing things (e.g. Heft, 2007).

14   An individual can discover new affordances by actively exploring the environment and, thereby, develop new relations to the environment (Baron, 2008; Bang, 2008). Such exploration is especially apparent in children's behavior. Adults, on the other hand, are used to certain ways of behaving and stop exploring (Baron, 2008). However, architecture can stimulate such exploration in adults by 'complexifying one's perceptual encounter with the environment' (*ibid.*, p. 334). Such built environments, Baron argues, necessitate the individual to continuously re-adapt to the surroundings. Baron bases his argument on an analysis of the Bioscleave House by Arakawa & Gins from 1997. The house is designed with uneven, hilly floors, poles with no apparent function, and angled walls. All of these elements continuously bring the user's body out of balance and re-activate the senses. Through these designed disturbances, the architecture of Arakawa & Gins never fixates or habituates the individual's attention. Thereby it stimulates the formation of new individual-environment relations (*ibid.*; Harrison, 2013). Another architectural example of designed disturbances is Final Wooden House by Sou Fujimoto. The house consists of tree logs stacked on top of each other in an uneven pattern that leaves space between the logs. In this interior, the logs' function encompasses a wall, ceiling, floor, staircase, chair and table. The user must reinterpret the logs anew for each new activity.

15   The influence of art and architecture on attention and the formation of new relations to the environment has also been explored in relation to urban and political contexts. Following Gibson's argument that an individual never perceives all the available information in the surroundings, Boetzkes (2015) argues that art can direct one's attention to specific elements of the urban surroundings. Through this process, individuals may acquire a new sensitivity to the available information in the surroundings and attune their vision to the ecological reality of the Anthropocene (*ibid.*; Latour, 2016). Boetzkes coins this with the term ecologicity (Boetzkes, 2015, p. 272). She argues that it is necessary to be critical of the ecologicity that is created by artists in the Anthropocene, for it can both make us more and less perceptive to climatic and political atmospheres of e.g. changes in the climate or overconsumption.

16   This argument is highly relevant for research on the mediating effect of ambiances in architecture. It is well established in research on ambiances and atmospheres that, by staging specific atmospheres, architects and designers can direct users' attention to certain objects and sensory phenomena, giving rise to specific affects and behavior (Borch, 2014; Bille, Bjerregaard & Sørensen, 2015). In everyday situations, however, individuals remain unaware of the ambiances and atmospheres that surround them. Without this awareness, individuals cannot develop a criticality towards the effect that ambiances and atmospheres have on what we see, feel and how we act.

17   Developing such perceptual abilities and becoming aware of an atmosphere and ambiance is necessary in order to gain a better understanding of the forces that shape our moods and sense of self through ambient subjectivation (Roquet, 2016). Following this, Roquet argues that disturbing a given ambiance and thereby 'misreading the air' can be an important step to new affects and social behavior. These arguments can be understood within the ecological approach to perception. If we understand the ambiance as a direction of our attention, then it is possible to argue that the ambiance also influences

what possibilities for action (affordances) an individual perceives. Becoming aware of the ambiance and its influence on perception should, in theory, shift the individual from perceiving the field of affordances to perceiving the landscape of affordances. This question addresses the ethical dimension of ambiance and atmosphere (*ibid.*) and, more broadly, architectural aesthetics. However, it does so not by offering a new, pre-determined way of seeing things, but rather by stimulating the individual to explore the different possibilities of acting and seeing a habitual environment anew.

18   This approach to ethics and ambiance strongly questions the role of architecture to protect the user from the environment. Rather than protecting the user, it urges the architect to challenge the user's body and mediate exploration between individual and the surroundings that open up for new possibilities of being. Artists and architects can help cultivate such a critical awareness of self and surroundings by drawing attention to the invisible surroundings (Boetzkes, 2015; Latour, 2016). A difference in the way we see things can be developed through a mode of vision that is not a frontally fixated gaze on an object, but a playful exploration of the ambiguities, shadows, uncertainties in the background (Houlgate, 1993). As Baron (2008) suggests:

> Getting the most out of our environment means more than re-educating the senses. It also means becoming open to new emotional experiences and reawakening in the participant a sense of playfulness that may have been dulled by daily habits and adult responsibilities.(...) Viewed in this way, art is more than an enjoyable distraction and architecture is more than protection from the elements. Each offers the possibility of more deeply engaged transactions with the environment. (Baron, 2008, p. 340).

19   In our two experiments, we explore this idea of architecture as being more than protection from the elements. Furthermore, we explore the potential of design to reawaken a sense of playfulness in the user and support engagement with the surroundings by shifting attention towards the atmosphere and thus revealing the landscape of affordances.

Experimenting with narrative inquiry

20   In the first experiment on ambiance, we explore on a conceptual level how architecture can be more than protection from the elements. Our exploration is based on the text 'General Principles of Architecture' written by Marc-Antoine Laugier in 1755 (it is the first chapter of his book *'Essai sur l'architecture'*). In the text, Laugier argues that the role of architecture is to create shelter that protects people from the natural environment. The argument is presented as a narrative of a man walking in the forest and seeking shelter from the uncomfortable outside climate of dampness, rain, sun and wind. The man does not find a proper shelter in the forest and, therefore, decides to build himself a hut from branches. Laugier coins this a primitive hut and argues that this is the origins of architecture and, therefore, the foundation for future architecture. With the concept of the primitive hut, Laugier presents a vision of architecture as strictly functional and isolated from context (Ghidoni, Piovene & Tamburelli, 2013). The built environment and its creator are presented as separated from the natural and social environments. This stands in stark contrast to the theoretical framework and contemporary architectural practices discussed in this article.

21 The idea of the primitive hut has had an effect on architectural discourse and practice (*ibid*.), and continues to appear in discussions of the role of architecture in relation to the natural environment. In recent years, architects and scholars have re-interpreted the text to present alternate visions for the future of architecture; visions where architecture is deeply intertwined with social and climatic conditions (*ibid*.; Giovanni, 2000). However, as of yet, the primitive hut has not been re-interpreted with a vision of an architecture that mediates new, engaged relations between the individual and environment. It is here that we wish to contribute. Our re-interpretation is guided by our hypothesis that architectural design can draw attention to the ambiance and, through this, invite the user to explore and interpret the surroundings anew.

22 Our re-interpretation of the primitive hut follows the method of narrative inquiry. Narrative inquiry is a qualitative method developed to understand experience and meaning-making through the analysis of written texts (Tosca, 2015; Watts, 2017). This method has been applied in fields ranging from developmental psychology where the analyzed text is a transcribed interview, to cultural texts in cultural studies. In a narrative inquiry, the analysis of a text is presented through a fictional narrative. The fictional narrative weaves together key themes from the text analysis in a configuration that appeals to the imagination and aesthetic understanding of the reader (Tosca, 2015). Therefore, the fictional narrative gives a deeper and more aesthetic understanding of the main themes from the analysis. Narrative inquiry has not been applied to experimentations on ambiance or atmosphere. By applying this method, we wish to illustrate a novel approach to experimentation on ambiance. This method enables us to atmospherically communicate (Albertsen, 2012) our experimentation on ambiance.

23 Our analysis of Laugier's text is based on the theoretical framework presented in this paper. To present our analysis as a fictional narrative, we draw on design examples from contemporary architecture, specifically, from architects Sou Fujimoto and Hiroshi Sambuichi. In the following section, we present our fictional narrative in three parts. Each part is followed by a discussion, in which we relate the fictional narrative to the theoretical framework and design examples. In the first part, our fictional narrative is specifically focused on the potential of architecture to re-awaken the user's body and challenge habitual ways of acting. Here, we draw on ecological psychology and the design practice of Sou Fujimoto. In the second part, our fictional narrative is focused on the potential of architecture to draw attention to the invisible atmospheric qualities. Here, we draw on the multisensory perception of the surroundings and the design practice of Hiroshi Sambuichi. In the third and final part, we conclude our fictional narrative with a discussion of the ethics of ambiance and the role of architecture.

Re-awakening the users' body

Illustration 1: Extract from original text by Marc-Antoine Laugier (1755, p. 9) on the left and corresponding extract from our fictional narrative on the right

General principles of Architecture.

It is with Architecture as with all other arts; its princi-ples are founded upon simple nature, and in the pro-ceedings of this are clearly shewn the rules of that.

Let us confider man in his first origin without any other help, without other guide, than the natural in-stinct of his wants. He wants an abiding place. Near to a gentle stream he perceives a green turf, the growing verdure of which pleases his eye, its tender down in-vites him, he approaches, and softly extended upon this enamelled carpet he thinks of nothing but to enjoy in peace the gifts of nature. Nothing he wants, he desires nothing, but presently the Sun's heat which scorches him, obliges him to seek a shade.

Principles of Architecture

It is with Architecture as with all other arts; its principles are founded upon mutual enrichment between actors of the world throughout time, and in these proceedings are carefully chosen reflections concerning this.

Let us consider humans in their ecological environment with friends and strangers, flora and fauna, gathered to spend some time together. They want to continuously define and adapt their surroundings according to their inspirations and social activities. Near to a small road they perceive a house of frames and transparent glass, the ambiguous layers of shadows and light arouse their curiosity, it's ambient interiors invites them, they approach and enter, and dispersed around the many protruding floors of the building some of them converse, some draw back and enjoy their own company while still feeling the presence of the others. While contin-uously exploring the myriad of ways that this house invites to re-inter-pret dwelling, one of the people presently notices a turbulent and windy environment on the narrow street outside, beckoning him to seek it out.

24   Our fictional narrative begins by discarding the idea of a 'general principle' for architecture with clearly formulated rules. Instead, we place emphasis on architecture arising in the continuous interactions between the built, social and natural environments. The architectural outcome of this co-development cannot be pre-determined. Therefore, we challenge Laugier's presentation of the individual's encounter with architecture as isolated from social relations. By focusing on the interactions, our definition of architecture is shifted to the in-between atmosphere. Following, we illustrate how atmosphere arises at the intersection between the building, the surrounding climate and the socio-cultural situation. We propose specific design examples ('a house of frames and transparent glass') that may stimulate interactions between people and the built environment. We suppose that interactions with these designed features might awaken a curiosity to explore the surroundings. Our design examples are based on the experimental building of Japanese architect Sou Fujimoto, House NA (illustration 2).

Illustration 2: House NA by Sou Fujimoto, Tokyo, Japan

Photo by Nicolás Boullosa. Creative Commons License: CC BY-SA 2.0

25　Possibly in relation to Laugier, Sou Fujimoto has referred to House NA as 'a primitive form of house' (Fujimoto, 2015, p. 174). House NA is designed for a small plot in a Tokyo neighborhood. With little space for experimentation, Fujimoto scaled down each floor of the building to the size of furniture (i.e. a floor the size of a table-top). The floors are stacked on top of each other in a pattern resembling a staircase. Therefore, each 'floor' functions both as steps in the staircase to move up and down the building, as well as the floor and ceiling of each space. This 'stacked' design creates full visibility between each space. The exterior wall of the house is made of windows, offering full visibility to the street outside. For Fujimoto, the building with its opaque floors and transparent walls resembles a tree in a forest with branches that users can use to interact with the 'vast forest' surrounding the 'tree' – a 'forest' in the scale of the city (*ibid.*). As illustrated by House NA, Fujimoto's understanding of a 'primitive house' is in stark contrast to Laugier's 'primitive hut'. Rather than protecting the user from the surroundings, Fujimoto seeks to architecturally re-create the experience of climbing up a tree. Therefore, he identifies potential in the natural environment to architecturally re-invent dwelling.

26　House NA not only re-invents dwelling through the architectural form, but also through the interactions of the social and natural environments with the building. The skewed floors of the building can be said to enhance the users' sensibilities towards their environment because they continuously challenge the users' perception, body and social interactions. The inhabitants in a house of transparent walls and furniture-sized floors must continuously explore their architectural surroundings as they move around. The function of each 'floor' is not pre-defined (such as, a bedroom or an office) but must be continuously re-interpreted. Furthermore, in our fictional narrative, we suppose that the transparent floors and walls produce ambiguities and shadows that invite the user to focus on the ambient background rather than fixating on an object. This awakens a playful gaze and a curiosity sparked by the ambiguity. Upon entering this re-interpreted

primitive hut, the users engage in different activities, defined by their individual interactions with the building. The building activates their bodies and sensitizes them to the socio-cultural ambiance arising inside and the climatic atmosphere outside. Following, in our fictional narrative, one user uses his heightened sensibility and the platform of the house to discover the surrounding environment. This is represented as a turbulent wind roaming the street outside, made visible by the glass wall. This draws the user's attention to its atmospheric quality, inviting him to engage with the wind outside. Thus, our primitive hut does not separate the individual from the natural environment, but stimulates interactions and invites the user to explore the environment outside of the building.

Drawing attention to the atmosphere

Illustration 3: Extract from original text by Marc-Antoine Laugier (1755, p. 9-10) on the left and corresponding extract from our fictional narrative on the right

He perceives a neighbouring wood, which offers to him the coolness of its shades: he runs to hide himself in its thickets and behold him there content. In the meantime a thousand vapours raised by chance meet one another, and gather themselves together, thick clouds obscure the air, a frightful rain throws itself down as a torrent upon this delicious forest. The man badly covered by the shade of these leaves, knows not how to defend himself from this invading moisture that penetrates on every part.

He hears wind whistle against a neighboring wall, which offers to him the curiosity of its soundscape: he runs along the facades to surround himself with tall buildings and behold him there the strongest and most remarkable wind. A thousand vapors meet and raise around him, spinning in invisible whirlwinds, gathering leaves and litter from the ground, a frightful current almost throws him off his feet in this delicious and exhilarating meeting between the wind and the city. The man, embraced in turbulence, grabs hold of a torn plastic bag and lets it move him around, investigating the interaction between wind, the bag and himself.

27   Laugier depicts the relation between the individual and the natural environment as either blissful or hostile. For instance, the individual either 'thinks of nothing but to enjoy in peace the gifts of nature' or 'knows not how to defend himself from this invading moisture' (Laugier, 1755, p. 9). In this understanding, there is no description of multisensory interactions between the individual and the surrounding environment. Therefore, lacking in the narrative of Laugier is the multisensory perception that defines atmospheres and aesthesis (Böhme, 1993). In our fictional narrative, we seek to introduce these multisensory interactions. We convey a situation in which architectural design makes the user aware of the surrounding atmosphere. This awareness of atmosphere draws attention to the invisible elements in the surroundings and inspires the user to explore new interactions with the environment. The user in our fictional narrative is first made aware of the wind through the interaction between the wind and the wall of a building. Following this, he discovers the interactions between wind, vapors and litter. The user then uses this new sensitivity to the atmospheric qualities to experiment with the movement of a plastic bag. Here, we seek to convey that the natural, built and social environments are inseparable, and it is in their meeting that an individual becomes aware of atmospheric qualities.

28   We do not provide any direct design references in this section of the fictional narrative. However, our focus on the atmospheric quality of wind and the interactions between social, built and natural environments is inspired by the Japanese architect Hiroshi Sambuichi. According to Sambuichi, architecture is to consider 'the earth's details' (Sambuichi, 2011, p. 5). Sambuichi is concerned with the relation between nature and architecture and seeks to reveal the conditions of nature. The conditions of nature include both the social environment and the so-called energyscapes of the earth.

Sambuichi introduces the term energyscapes as an alternative to landscapes (Lee, 2010). He defines energyscapes as the 'moving materials' of a site, such as the wind-flow, the sun's movement, shifting weather, seasonal changes, ebb and flow of tide. Sambuichi argues that the invisible energyscapes of the earth can be made visible and accessible to humans through architectural alterations in the environment (Lee, 2017).

Illustration 4: Orizuru Tower by Sambuichi Architects, Hiroshima, Japan

Photo by jj-walsh. Creative Commons License: CC BY-NC-ND 2.0

29   Sambuichi's understanding of the connection between the social and natural environments can be exemplified with the Inujima Art Project Seirensho – a museum and adjacent landscape on an island in the Seto Inland Sea. The museum is heated and cooled using only natural convection processes, while the adjacent landscape of tangerine trees is fertilized by the excrements of the museum's users (Lee, 2010, p. 19-20). Therefore, the building, users and landscape of the museum are interrelated through architectural design. In another project, the Orizuru Tower, Sambuichi uses architectural form to make the moving materials of the landscape outside felt in the interior of the building. On the top floor of the building, visitors are met with hilled floors and no exterior walls. Wind enters and is accelerated by the form of the floor, making visitors feel its presence. These design strategies integrate the atmospheric, invisible moving materials, such as the wind, into the form and materiality of the built environment. In our fictional narrative, we envision that, by using such design strategies, architects can inspire users to creatively experiment and engage in new ways with their surroundings.

The potential of architecture

Illustration 5: Extract from original text by Marc-Antoine Laugier (1755, p. 10-11) on the left and corresponding extract from our fictional narrative on the right

A cave presents itself to his view, he Aides into it, and finding himself dry applauds his discovery. But new defects make him dislike his abode, he feels himself in darkness, he breathes an unhealthful air; he goes out of it resolved to supply by his industry the inattentions and neglects of nature. The man is willing to make himself an abode which covers but not buries him.

Some branches broken down in the forest arc the proper materials for his design. He chases four of the strongest, which he raises perpendicularly and which he disposes into a square. Above he puts four others across, and upon these he raises some that incline from both fides. This kind of roof is covered with leaves put together, so that neither the sun nor the rain can penetrate therein; and now the man is lodged.

Indeed, cold and heat will make him sensible of their inconveniences in his house, open on every part; but then he will fill up between the space of the pillars, and will then find himself secure. Such is the step of simple nature: It is to the imitation of her proceedings, to which art owes its birth.

His dance with the plastic bag presents itself to the view of a passer-by; She walks towards the commotion, applauding his discovery. The torn plastic bag makes the ambiance of the place become apparent to her; she goes out of the turbulence, resolved to supply by her industry the sensitivity towards ambiguous and tentative aspects of the city. She notices how seagulls reside on the traffic islands. She notices the light regulations determining the speed with which to cross. She notices how smell bring her attention to the crossroad. She, the architect, is willing to make herself a critical design discourse which enhances the perceptual capabilities of both herself and others, one that enriches her surroundings and invites the inhabitants of her work to continuously rethink their social and ecological relations.

Ambiguous aspects of the city arc the proper materials for her design. She disposes a conceptual framework where reading the site and being critical of her own understanding of the user and the relation between user and environment is her main focus. She puts this framework together to enhance sensitivities to global and local invisible aspects of the city as well as the local ambiances that surrounds her, lodging herself in the ambience of the particular moment.

Indeed, cold, heat, socioeconomic structures and foul air will make humans sensible to their qualities, this sensibility being the human capacity for development as they will continue to exchange with their environment and therefore mutually enrich themselves and their surroundings. Such is the step of architecture: It is the ambiguity of ecological and social proceedings, to which the human body relates.

30   In the beginning of this section, Laugier presents his analysis of the cave as a defect of nature. There is an interesting comparison between Laugier's and Fujimoto's analysis of the cave. Fujimoto (2008) presents the cave as a place filled with opportunities for unexpected discoveries. Fujimoto argues that the cave allows people to continuously discover their environment anew. He argues that future architecture should possess 'cave-like' qualities. In our fictional narrative, we present a vision of architecture that supports the continuous and mutually enriching exchange between the social, natural and built environment. It is an architecture that can be said to have cave-like qualities. These cave-like qualities necessitate continuous re-interpretation and can make users sensitive to the ambiguities of the city and the complexity of nature by drawing the users' attention to the invisible aspects of the surroundings.

31   The complexity of nature and invisible aspects of the surroundings is extended in our fictional narrative to also include the urban environment. Therefore, the 'inconveniences of nature' include not only rain but also, for instance, burnt oil at a crossroads. However, contrary to Laugier's vision of an architecture that protects from these discomforts, we envision that the architect and the user of architecture become sensitive to and critically engage with both comfortable and uncomfortable aspects of atmospheres. Here, the role of architectural aesthetics and site gains an ethical dimension. Becoming aware of the atmosphere can contribute to gaining a felt understanding of the Anthropocene reality. With this, the understanding of the natural environment in our fictional narrative both extends that of Laugier and Sambuichi. Laugier understands art as an imitation of nature's processes, whereas Sambuichi understands architecture as making visible the moving materials of nature. However, Sambuichi limits his understanding of the moving materials to natural phenomena. In our fictional narrative, moving materials are extended to include elements of urban 'nature' – such as pollution and sea-gulls on traffic islands. It is precisely engaging with this ambiguity between the natural and social environments that is the step for future architecture.

Experimenting through architectural design

32   The second experimentation on ambiance explores how architectural design can engage with the ambiguity between the social and natural environments. The experiment is the conceptualization and realization of the Urban Carpet urban installation. It is conceptualized by Polina Chebotareva, and designed and realized in collaboration with Elias Melvin Christiansen. The site for Urban Carpet was a refuge island in the middle of a crossroads in central Aarhus, Denmark. The crossroads lies between the main train station and the main shopping street, and is used by over 50,000 people daily. The complex entanglements of the Anthropocene between the social, natural, political and built environments are particularly apparent on the refuge island. Cars, speed regulations, trees, birds, people, sounds, exhaust fumes, buses, litter, wind are just some of the interrelated agents. However, despite this intriguing complexity, refuge islands are largely overlooked both by designers and users. It is a site defined by habitual behavior and a fixated gaze ahead, towards the shift between the green and red lights. Few people, if any, look around to notice the entanglements in the surrounding atmosphere. The ambiance of the site is strong and slightly unpleasant – a feel of hurrying forward, but the site itself and its possibilities for interactions remain barely visible. Urban Carpet was conceptualized to bring the atmosphere to people's awareness by re-awakening their senses and stimulating them to see this everyday environment anew.

33   The design experimentation follows the method of research by design. It is a methodology where knowledge about architecture emerges through the process of designing (Groat & Wang, 2002). Most often, research within this methodology is interested in the tacit knowledge of the designer. Following this, in research by design, an architect (or artist/designer) documents and reflects upon her or his own design process. However, research by design can also be applied as a methodology to test and understand a theoretical assumption (e.g. Rietveld, 2016). Although there are fewer instances of such research by design, it is an interesting and relevant approach for experimenting on ambiance. This approach documents the process of how theory generates design decisions. Thereby, knowledge can not only be gained about the tacit process of design and the experience of ambiance, but also how theoretical knowledge and assumptions about ambiance and atmosphere can materialize at a site. In such processes, led by 'theoretical architects', the built design can be seen as a manifesto of the theoretical framework (Papadakis, 1992). And thus Urban Carpet can be seen as a manifesto of the theoretical framework and narrative discourse presented in this paper. Furthermore, just like the fictional narrative, the installation can be seen as a gestural transportation (Albertsen, 2012) of the explored atmosphere.

34   Observations of people's interactions with Urban Carpet were conducted by Polina Chebotareva during the installation period from August 29th to September 17th 2018. The first results from these are presented in the next section. However, to be within the scope of this article, we limit our focus on presenting how the theoretical framework guided the design concept for Urban Carpet.

Atmospheric mediation at a crossroads

35   Urban Carpet is, as the title implies, a carpet-like structure made up of small pieces of burnt wood that are woven together using a steel wire. The carpet covers the whole area of the refuge island – roughly 100 square meters – so all pedestrians crossing the street must walk on top of it to get to the other side. From afar, the carpet is barely noticeable. It is only distinguished from the surroundings by its black color. Each piece of wood is just 15 mm thick, so the carpet follows the existing landscape of the island and does not create any new form. Furthermore, it is placed centrally on the island, 50 centimeters from the road on each side. However, the carpet becomes very noticeable in interactions with people and weather. The small size of the wood pieces and the weaving technique means that the carpet produces a sound when walked on. The sound is faint, but distinct. The sound changes depending on the speed of walking, whether one walks or cycles, on their footwear, etc. Therefore, the sound changes in each individual interaction. Furthermore, the materiality of the burnt wood pieces interacts with the surrounding environment. The more people walk on the carpet, the more ash is carried away from the top layer of the burnt pieces of wood. Consequently, the color of the carpet changes from a deep black to a brownish-black. Likewise, the materiality interacts with the weather. Immediately after a rainfall, and if the wind is blowing in the right direction, the carpet gives off a faint odor of burnt wood.

Illustration 6: Urban Carpet, Aarhus, Denmark

Photo by Rasmus Hjortshøj

36   The guiding theoretical concept for Urban Carpet is to create an installation that does not stage a new ambiance, but brings the existing atmosphere to users' awareness and stimulates explorative behavior. An ambiance can be staged by directing the user's attention to specific objects and sensory phenomena that stimulate actions and affects related to a specific ambiance (e.g. Bille, 2015). And thus the principle of *not* staging a new

ambiance was interpreted through the design of a form that imitates the existing landscape of the island. This means that the new form does not lead users' attention to any specific, new actions that would create a new ambiance. The carpet is not meant to disrupt the behavior of walking across the refuge island, it is simply meant to bring the island and its atmosphere to people's awareness. According to Baron (2008), becoming aware of one's surroundings happens when the users' body is brought slightly out of balance. Following this theoretical idea, Urban Carpet was designed of small pieces of burnt wood. Walking on wood is a different experience than walking on asphalt (the material of the crossroads). To make this experience bodily (and not visual), the wood was burnt to achieve a black color that does not stand out in relation to the grey asphalt. Therefore, it is only upon actually stepping on the carpet, that the users' bodies were brought out of balance. Once the users' bodies were brought out of balance, the burnt materiality of the carpet was chosen to stimulate their senses through sound and smell. Finally, following Sambuichi (Lee, 2017), to bring forth an existing atmosphere to users' awareness, architectural design must work with the moving materials of the site. Following our fictional narrative, this includes both natural, social and political aspects of the atmosphere. This led to the decision of working with a material that would change expression in relation to use and weather. The burnt wood in the middle of the island gradually changed to a brown-black color, revealing the traces of peoples' movements. Rain would make the carpet give off a smell. And the grass and tree growing on the two sides of the island would grow in-between the small wood-pieces of the carpet, creating a contrast between living and dead 'nature', and between black and green hues. Finally, the decision to place the carpet in the middle of the island was based on safety regulations from the municipalities. All of these design decisions were made to direct people's attention to the invisible atmospheric qualities of the crossroads.

Illustration 7: Detail of Urban Carpet, edge of refuge island

Photo by Rasmus Hjortshøj

37   Following the theoretical assumption that becoming bodily aware would lead to explorative behavior and the development of new actions and affect (Baron, 2008), it was anticipated that people would explore the island anew when it was covered by the carpet. Furthermore, it was anticipated that these actions would be guided by the available affordances (landscape of affordances) that were not actualized on the island before the carpet was installed. The preliminary observations of behavior on the Urban Carpet offer support for this hypothesis. The first and most apparent observation was that people interacted with the sound that the carpet made. They stamped their feet while walking across the carpet to produce more of the sound and, if waiting for the green light while standing on the carpet, people would circle their feet, dance, walk across, and feel the carpet. This can be seen as a sign that their bodies were activated by the carpet. A second interesting observation was that people began interacting with the edge of the island. This edge was not created by the carpet – it was there before, created by the cobblestone. However, without the carpet, nobody interacts with this edge. Therefore, the carpet accentuates the existing edge, making people aware of its affordance. Observations showed that, while the carpet was installed, people climbed on the edge, played with it with their feet, some children even used it as a slide. It was an existing affordance that became visible through the design of Urban Carpet. Finally, people also stood on the carpet while waiting for the green light instead of standing right by the edge of the road. This meant that fewer people crossed the road on the red light, and more people looked around to the left and right while waiting on the carpet for the green light.

38   It was out of the scope of the design experiment to conduct interviews or 'Commented City Walks' (Thibaud, 2013) with the users of Urban Carpet. Hence, the first results from the observations can be seen as propaedeutic. They illustrate that design can make apparent invitations for actions that are overlooked. Accordingly, the results point to an area in need of more experimentation on ambiance. The theory-driven research by design illustrated how a theoretical framework based on the concepts of atmosphere and ambiance can be materialized. Understanding how such theoretical frameworks can be materialized through design is also an area for future experimentation on ambiance.

Conclusion

39   To conclude this article, we would like to return to the beginning, to the Danish pavilion at the 14th International Architecture Exhibition La Biennale di Venezia. In the pavilion, the curator Stig L. Andersson explored the empowerment of aesthetics by staging multisensory interactions between visitors and elements from the natural and built environments. This propaedeutic exploration illustrated two aspects of atmosphere that have been overlooked in experimentations on ambiance. Namely, that atmosphere lies at the intersection of the natural, built and social environments, and that the user can be empowered by becoming aware of the atmosphere. These overlooked aspects of atmosphere were linked theoretically by drawing on ecological theories of perception (Gibson, 1986; Houlgate, 1993) and the ethics of ambiances (Roquet, 2016). This theoretical link created a framework for our two experimentations on ambiance, where the overlooked aspects of atmosphere were explored in relation to architectural design.

40   The first experimentation is a conceptual exploration that followed the method of narrative inquiry. Following our theoretical framework, we analyzed and re-

conceptualized the primitive hut from the text 'Essai sur L'Architecture' (Laugier, 1755). Our analysis was presented as a fictional narrative that illustrated how architectural design can draw the users' attention to the invisible atmospheric qualities of the surroundings. In our fictional narrative, we referenced the architectural design of Sou Fujimoto and Hiroshi Sambuichi. By re-writing the text of Laugier and re-conceptualizing the primitive hut, we presented an understanding of an architecture that does more than protect from the climate. In our re-conceptualization, atmospheric elements, such as a gust of wind, are perceived as an architectural quality. Architecture, we argued, has the potential to engage users with ambiguous entanglements between the natural, built and social environments. Just as Laugier's essay has served as an inspiration and direction for understanding architectural practice, our fictional narrative can be seen as a starting point for future experimentation on ambiance.

41   Our second experimentation on ambiance is a theoretically driven design process of the installation Urban Carpet. The installation was conceptualized following the theoretical framework and fictional narrative presented in this article. The installation sought to make visible the available affordances of the site by bringing users' attention to the existing atmosphere. This was achieved with a design that was subtle, barely visible and instead of introducing a new form to the site, it followed the existing landscape. However, the design became very noticeable in interactions with users and weather – it made a sound when walked upon, its color changed with use, and its smell changed with weather. The first results show that people became more aware of their body and started interacting with the site in new ways. Accordingly, a theoretically driven architectural design practice can be seen as another approach for further experimentation on ambiance.

42   The two experimentations on ambiance described in this article contribute to experimental research on ambiance in several ways. First both experimentations used gestural transportation (Albertsen, 2012) to communicate the explored atmosphere, and applied methods that have previously not been used in experimentations on ambiance. Second, the two experimentations showed that: 1) atmosphere lies in interactions between the natural, social and built environments, and 2) architectural design can draw users' attention to these interactions and, thus, bring the atmosphere to users' awareness. Finally, rather than focusing on the perception of an existing ambiance or the staging of a new atmosphere, the two experiments explored the effect of bringing an existing atmosphere to users' attention thorough architectural design. The theoretical discussion and observations of Urban Carpet have illustrated that there is reason to believe that by bringing users' attention to the existing atmosphere, users' engage in exploratory behavior and develop new relations to their surroundings. The reconceptualization of the primitive hut illustrates that the latter re-frames the role of architecture.

43   Architectural design has the potential to make people more attentive to their surroundings and support the formation of new affect and interactions. Mediating such sensitivities between individual and environment is a step towards architecturally addressing the challenges of the Anthropocene. The new approaches to experimenting on ambiance presented in this article allows to explore the empowering role of aesthetics in architecture.

BIBLIOGRAPHY

Albertsen, Niels. 2012. Gesturing atmospheres. In Thibaud, Jean-Paul and Siret, Daniel. (Eds*.) Ambiances in action / Ambiances en acte(s) - International Congress on Ambiances, Montreal 2012*, Montreal: Canada. International Ambiances Network, 69-74.

Albertsen, Niels. 2016. Atmosphere: Power, Critique, Politics. A conceptual analysis. In Rémy, Nicolas & Tixier, Nicolas (Eds.) *Ambiances, tomorrow. Proceedings of 3rd International Congress on Ambiances, Volos, Greece.* International Network Ambiances; University of Thessaly, vol. 2, 573-578.

Andersson, Stig L. (Ed.). 2014. *Empowerment of Aesthetics: catalogue for the Danish Pavilion at the 14th International Architecture Exhibition; La Biennale di Venezia 2014* (1. ed). Skive: Wunderbuch.

Adey, Peter. 2013. Air/Atmospheres of the Megacity. *Theory, Culture & Society,* 30: 7/8, 291-308. DOI: 10.1177/0263276413501541

Bang, Jytte. 2008. Conceptualising the environment of the child in a cultural-historical approach. In M. Hedegaard & M. Fleer (Eds.) *Studying children: a cultural-historical approach*. Maidenhead: Open Univ. Press.

Baron, Reuben. M. 2008. The Role of Tentativeness in Perceiving Architecture and Art: A Far-from-Equilibrium Ecological Perspective. *Ecological Psychology*, 20: 4, 328-342. DOI: 10.1080/10407410802433085

Bille, Mikkel. 2015. Lighting up cosy atmospheres in Denmark. *Emotion, Space and Society*, 15, 56-63. DOI: 10.1016/j.emospa.2013.12.008

Bille, Mikkel, Bjerregaard, Peter & Sørensen, Tim Flohr. 2015. Staging atmospheres: Materiality, culture, and the texture of the in-between. *Emotion, Space and Society,* 15, 31-38. DOI: 10.1016/j.emospa.2014.11.002

Boetzkes, Amanda. 2015. Ecologicity, Vision, and the Neurological System. In H. Davis & E. Turpin (Eds.) *Art in the Anthropocene – Encounters Among Aesthetics, Politics, Environments and Epistemologies.* London: Open Humanities Press.

Böhme, Gernot. 1993. Atmosphere as the Fundamental Concept of a New Aesthetics. *Thesis Eleven*, 36:1, 113-126. DOI: 10.1177/072551369303600107

Borch, Christian. (Ed.). 2014. *Architectural Atmospheres On the Experience and Politics of Architecture*. Basel: De Gruyter.

Coelho, Carolina. 2015. The Living Experience as a design content: from concept to appropriation. *Ambiances*, 1 | 2015. DOI: 10.4000/ambiances.606

Demers, Claude MH and Potvin, André. 2016. From History to Architectural Imagination: A physical ambiences laboratory to interpret past sensory experiences and speculate on future spaces. *Ambiances*, 2 | 2016. DOI: 10.4000/ambiances.756

Edensor, Tim & Sumartojo, Shanti. 2015. Designing Atmospheres: introduction to Special Issue. *Visual Communication*, 14: 3, 251-266. DOI: 10.1177/1470357215582305

Fang, Hu (Ed.). 2016. *Sou Fujimoto: Towards a Non-Intentional Space, Vol. 1: About Sou Fujimoto's Architectural Design for Mirrored Gardens.* London: Koenig Books; Beijing: The Pavilion.

Fujimoto, Sou. 2008. *Primitive Future. Contemporary Architects Series 1.* Tokyo: INAX Publishing.

Fujimoto, Sou. 2015. *Sou Fujimoto Architecture Works 1995-2015.* Tokyo: TOTO.

Gibson, James Jerome. 1986 [1979]. *The ecological approach to visual perception*. New York, NY: Psychology Press.

Ghidoni, Matteo, Piovene, Giovanni & Tamburelli, Pier Paulo. 2013. Editorial. What's wrong with the primitive hut? San Rocco, 8 (Winter), 3-6.

Giovannini, Joseph. 2000. From Absolute Past to an Uncertain Future: The New Primitive Hut. In Kroloff, R. *Architecture vol. 89 NO. 1. January 2000.* New York: BPI Communications.

Groat, Linda. N. & Wang, David. 2002. *Architectural Research Methods*. New York: J. Wiley.

Harrison, Ariane Lourie (Ed.). (2013). *Architectural theories of the environment: posthuman territory.* New York, NY: Routledge, Taylor & Francis Group.

Heft, Harry. 2007. The Social Constitution of Perceiver-Environment Reciprocity. *Ecological Psychology*, 19: 2, 85-105.

Houlgate, Stephen. 1993. Vision, Reflection, and Openness: The 'Hegemony of Vision' from a Hegelian Point of View. In Levin, David Michael (Ed.) *Modernity and the Hegemony of Vision.* Berkeley, Los Angeles, London: University of California Press. 87-124.

Ingold, Tim. 2005. The eye of the storm: Visual perception and the weather. *Visual Studies*, 20: 2, 97-104. DOI: 10.1080/14725860500243953

Latour, Bruno. 2003. Atmosphère, Atmosphère. In Susan May (Ed). *Olafur Eliasson: The weather project.* Exhibition catalogue. London. Tate Publishing.

Latour, Bruno. 2016. Sensitizing. In C. A. Jones, D., Mather & R. Uchill (Eds.): *Experience: culture, cognition, and the common sense*. Cambridge, Massachusetts London, England: The MIT Press.

Laugier, Marc-Antoine. 1755. *An Essay on Architecture.* London. Printed for T. Osborne and Shipton in Grey's Inn.

Lee, Alex H. 2010. Hiroshi Sambuichi Inujima Art Project Seirensho. In K. Vindum (Ed). *Arkitekten nr. 1. januar 2010.* Copenhagen: Arkitektens Forlag.

Lee, Alex H. 2017. *Sambuichi: Kaze Mizu Taiyo*. Frederiksberg: Forlaget Cisternerne.

Linnet, Jeppe Trolle. 2012. The social-material performance of cozy interiority. In Thibaud, Jean-Paul and Siret, Daniel (Eds.). *Ambiances in action / Ambiances en acte(s) - International Congress on Ambiances, Montreal, Canada.* International Ambiances Network, pp. 403-408. <halshs-00745538>

McCormack, Derek. 2008. Engineering affective atmospheres on the moving geographies of the 1897 Andrée expedition. *Cultural Geographies,* 15, 413-430.

Papadakis. Andreas. 1992. *Andreas Papadakis presents Theory experimentation, an intellectual extravaganza.* London: Royal Academy of Arts.

Rahm, Philippe. 2016. Post-Critical Urbanism. *CARTHA,* II: 20.

Rietveld, Erik. 2016. Situating the Embodied Mind in a Landscape of Standing Affordances for Living Without Chairs: Materializing a Philosophical Worldview. *Sports Medicine*, 46: 7, 927-932. DOI: 10.1007/s40279-016-0520-2

Rietveld, Erik & Kiverstein, Julian. 2014. A Rich Landscape of Affordances, *Ecological Psychology*, 26:4, 325-352, DOI: 10.1080/10407413.2014.958035

Roquet, Paul. 2016. *Ambient Media Japanese Atmospheres of Self*. Minneapolis, London: University of Minnesota Press.

Sambuichi, Hiroshi. 2011. SAMBUICHI. In J. Hashimoto (Ed.). *The Japan Architect vol. 81: SAMBUICHI, Spring 2011.* Tokyo: Shinkenchiku.

Smailbegovic, Ada. 2015. Cloud Writing: Describing Soft Architectures of Change in the Anthopocene. In Davis, Heather & Turpin, Etienne (Eds.) *Art in the Anthropocene – Encounters Among Aesthetics, Politics, Environments and Epistemologies.* London: Open Humanities Press.

Thibaud, Jean-Paul. 2013. Commented City Walks. *Journal of Mobile Culture*, 7: 1, 2-32.

Thibaud, Jean.-Paul. 2015. The backstage of urban ambiances: When atmospheres pervade everyday experience. *Emotion, Space and Society*, *15*, 39-46. DOI: 10.1016/j.emospa.2014.07.001

Tosca, Susana. (2015). Dreaming of e-reading futures. *Digital Creativity*, *26*(2), 83-91. DOI: 10.1080/14626268.2015.1046082

Wagenfeld, Malte. 2008. The Aesthetics of Air: Experiments in Visualizing the Invisible. *Architectural Design,* 78: 3, 20-25.

Watts, Laura. 2017. *The Draukie's Tale: Origin Myth for Wave Energy.* in I Szeman & D Boyer (eds), Energy Humanities: an Anthology. Johns Hopkins University Press, Baltimore MD, pp. 352-357.

Withagen, Rob, Araújo, Duarte & de Poel, Harjo J. 2017. Inviting affordances and agency. *New Ideas in Psychology*, 45, 11-18.

Zumthor, Peter. 2006. *Atmospheres: architectural environments - surrounding objects.* Basel: Birkhäuser.

ABSTRACTS

This article presents an exploration of two previously overlooked aspects of atmosphere. First, that atmosphere lies at the intersection of the natural, built and social environments. Second, that architectural design can bring an existing atmosphere to users' attention. We present the hypothesis that, by bringing an existing atmosphere to users' attention, architects can stimulate explorative behavior and the formation of new relations between individual and environment. This hypothesis is based on the ecological theory of perception, examples of contemporary experimental architecture and the ethics of ambiance.

We explore our hypothesis with two experimentations on ambiance. The first experimentation follows the method of narrative inquiry and presents a reconceptualization of 'the primitive hut' by Marc-Antoine Laugier. Results from the experimentation show how elements such as a gush of wind can be perceived as an architectural quality. The second experimentation follows the method of research by design and presents the theoretically-driven design process of the installation Urban Carpet. The first results show that the installation made users more aware of their body-in-space, and users started interacting with the site in a new way. The experimentations introduce new methods to ambiance research and shift the research focus to mediation of new individual-environment relations.

Cet article propose d'explorer deux aspects auparavant négligés de l'ambiance. Le premier est que l'ambiance se situe à l'intersection des environnements naturels, construits et sociaux. Et le second, que le design architectural peut attirer l'attention des usagers sur une ambiance déjà existante. Nous présentons ici l'hypothèse qu'en attirant l'attention des usagers sur une ambiance déjà existante, les architectes peuvent stimuler un comportement exploratoire des

usagers et l'apparition de nouvelles relations entre individu et environnement. Cette hypothèse est notamment basée sur la théorie écologique de la perception, sur des exemples d'architecture expérimentale contemporaine et sur l'éthique de l'ambiance.

Nous interrogeons notre hypothèse par le biais de deux expérimentations sur l'ambiance. La première expérimentation s'appuie sur la méthode d'enquête narrative et présente une reconceptualisation de la hutte primitive de Marc-Antoine Laugier. Les résultats de cette expérimentation montrent par exemple que des éléments comme des bourrasques de vent peuvent être perçus comme une qualité architecturale. La deuxième expérimentation utilise la méthode de *research by design* et présente le processus de conception de l'installation Urban Carpet. Les premiers résultats montrent que l'installation rend les utilisateurs plus conscients de leur corps dans l'espace, et qu'ils interagissent avec le site d'une manière nouvelle. Ces expérimentations introduisent de nouvelles méthodes dans le champ de la recherche sur l'ambiance et déplacent notre focale sur la question de la médiation de nouvelles relations entre individu et environnement.

INDEX

AUTHORS

POLINA CHEBOTAREVA

Polina Chebotareva. M.Sc. in Psychology (University of Copenhagen) and currently a PhD fellow at Aarhus School of Architecture. She is a member of Research Lab 3 Emerging Architectures. Her research interests include the ecological approach to perception, ambiance and atmosphere, the ethics of aesthetics, and architectural design in the Anthropocene.
pc@aarch.dk

NINA RASK

Nina Rask. BA in Architecture (Royal Danish Academy of Fine Arts School of Architecture, Design and Conservation) and M.Sc. in Information Technology (IT University of Copenhagen) and currently an industrial PhD fellow at the IT University and KHR Architecture. She is a member of the Adaptive Environments (Æ) Research Group and Intermedia Lab at ITU. Her interests include urban transformation, living practices, ambiances and atmospheres, adaptive lighting and transparent building materials.
ninc@itu.dk